

MC3 LK, IR



Type

Electric dental micromotor MC3 LK and IR with brushes. Non-sterilisable, compact and robust, oil-sealed micromotor, adapted to low speeds. Removable, sterilisable sleeves. Interchangeable brushes.

- MC3 LK: with light, internal spray
- MC3 IR: without light, internal spray

Technical data and assembly

Coupling

Power supply by multipurpose cable, for turbines, air motors and MC3 fig. 1

Classification

Class IIa, "active medical devices", as per section III "Classification", Rule 9 of Annex IX to Directive 93/42 EEC, namely: "Therapeutic devices intended to administer or exchange energy".

Comments

The performance of the motor varies, depending on the type of electronic power supply used.

Electromagnetism

Corresponds to the electromagnetic compatibility in accordance with CEI 601-1-2.

Safety

According to IEC 601-1 standard (General safety for Medical Electrical Equipment), the MC3 motor shall be classified as a class II type BF device. Associated terminology is defined in section 2.1.7 & 2.2.5 of the same document. The following regulations as specified in IEC 601-1 must be observed:

- "Protection against electrical shock"
- "Leakage currents"
- "Protection against excessive temperatures and other safety hazard"

Cooling

By compressed air. Place the flow-meter on the connector and set 10 normliter/min. fig. 2

Coupling

Connection in accordance with ISO 3964, with the handpiece retaining ring.

- MC3 LK: Version connector internal spray and light
- MC3 IR: Version connector internal spray (without light)

Junction

Power supplied through multifunction tube with silicon sheath, from the 4VLR, 4VLM, 4VLRB families.

Tube assembly on MC3 LK and IR

Remove the adaptor-sleeve for turbines from the cable fig. 1. Remove the sleeve fig. 3. Check that the back of the micromotor and the plug on the cable are clean, rotate in order to find the exact position and push right in. Screw the nut of the cable tightly fig. 4. Replace the cover.

Important

Liquid or spray must not be allowed to penetrate inside the motor, due to risk of irreversible damage. Never connect an instrument with a micromotor that is running.

Changing the bulb

MC3 LK: figs 3 and 5. Box of 5 bulbs. Wear rubber gloves when carrying out this changing operation.

Changing the carbon brushes

Attention: Precision work. Keep the carbon

brushes dry and never let them come into contact with lubricant, as otherwise they may be irreversibly damaged. To remove the 2 carbon brushes, follow the procedure shown in figs 3 and 6 for MC3 LK, IR.

Blow dry, clean air across the apertures at the rear of the body of the motor.
To reassemble, proceed in the reverse order.

Seals replacement

- To change the o-rings REF 011.35.28-010, fig. 7
- To change the seal REF 011.75.56-010, fig. 8
- To change the o-rings REF 705.02.66-010, fig. 6

Removing seal, place it on the tubes and remove the attachment fig. 4.

Maintenance

Maintenance animations at www.bienair.com

Only use maintenance products and/or components from Bien-Air. The use of other products and components can lead to annulment of the guarantee.

Important

After cleaning and disinfecting/sterilizing the instrument and before using it, operate at moderate speed, with a bur in the chuck, for 10 to 15 seconds to distribute, and remove, the excess lubricant.

Overhaul

Never disassemble the device. For all modifications and repairs, we recommend that you contact your regular supplier or Bien-Air direct. Bien-Air asks the user to have its dynamic instruments checked or inspected at least once a year thereafter.

Sleeves

Removable figs 3 and 4, sterilisable at 136°C $\pm 2^\circ\text{C}$ (277°F $\pm 3.6^\circ\text{F}$). The required time for sterilisation of our products must comply with the prevailing local regulations for this type of instrument.

Cleaning and disinfection

Use cleaner Spraynet, Bien-Air. Disinfect with a clean damp cloth. Products containing acetone, chlorine and bleach are not recommended as disinfectants.

Never immerse in solutions.
Not suitable for ultrasonic bath.

Excess material from products used for maintenance (lubricants, cleaning products and disinfectants) originating from CA or PM may penetrate into the electric brush motor and interfere with its functioning. It is essential to follow the maintenance instructions accompanying each product. Never lubricate the electric brush motor.

Environment

Temperature between -40°C (-40°F) and 70°C (158°F), relative humidity between 10% and 100%, atmospheric pressure 50 kPa to 106 kPa (7.3 to 15.3 psi).

Application

Product intended for professional use only.

Information

The technical specifications, illustrations and dimensions contained in these instructions are given only as a guide. They may not be the subject of any claim. The manufacturer reserves the right to make technical improvements to its equipment, without amending these instructions. The French original of this text conforms to the legal standards. For all additional information, please contact Bien-Air at the address indicated on the reverse.

Generalities

The device must be used by a competent person in accordance with the current legal provisions concerning industrial safety, health and accident prevention regulations, and these working instructions. In accordance with these requirements, the operator:

- must only use working devices that are in perfect working order: in the event of irregular functioning, excessive vibration, abnormal heating or other signs indicating malfunction of the device, the work must be stopped immediately; in this case, contact a repair centre that is approved by Bien-Air;
- must ensure that the device is used only for the purpose for which it is intended, must protect himself, his patients and third parties from any danger, and must avoid contamination through the use of the product.

The device is intended for medical treatment only; any use other than that for which this product is intended is not allowed and may prove to be dangerous. The medical device meets all the current European legal requirements.

The device is not authorised for use in an explosive atmosphere. (Anaesthetic gas)
Never immerse in disinfectant solutions.

Recommendations

It is essential to use dry, purified compressed air in order to ensure the long working life of the device. Maintain the quality of the air and the water by regular maintenance of the compressor and the filtration systems. The use of unfiltered hard water will lead to early blockage of the tubes, connectors and spray cones. Rest the device on a suitable support in order to eliminate the risk of injury to you yourself, to your patient and to third parties.

Guarantee

Terms of guarantee

Bien-Air grants the user a guarantee for its complete product range, covering any faulty functioning and defects in material or manufacture, for a period of 18 months from the date of the invoice. Bien-Air also offers a 24-month guarantee for the glass-bar light conductors.

In the event of justified claims, Bien-Air or its authorised representative will fulfil the company's obligations under this guarantee by repairing or replacing the product free of charge.

Any other claims, of whatever nature, in particular in the form of a claim for damages and interest, are excluded.

Bien-Air shall not be held responsible for damage or injury and the consequences thereof, resulting from:

- excessive wear and tear
- improper handling
- non-observance of the instructions for installation, operation and maintenance
- unusual chemical, electrical or electrolytic influences
- poor connections, whether of the air water or electricity supply.

The guarantee does not cover flexible "fibre optic" type conductors, or any parts made of synthetic materials.

The guarantee shall become null and void if the damage and its consequences are due to improper manipulation of the product, or modifications to the product carried out by persons not authorised by Bien-Air.

Claims under the terms of the guarantee will be considered only on presentation, together with the product, of the invoice or the consignment note, on which the date of purchase, the product reference and the Serial No. should be clearly indicated.

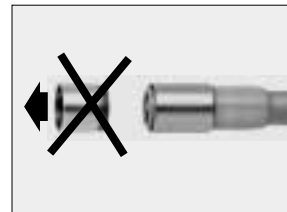


fig. 1



fig. 2

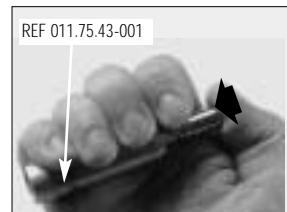


fig. 3



fig. 4a

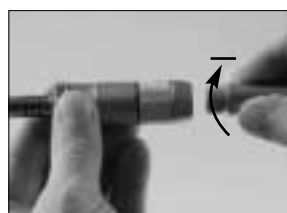


fig. 4b

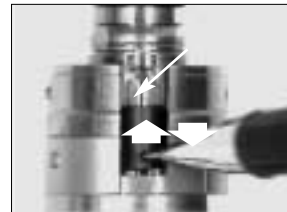


fig. 5a

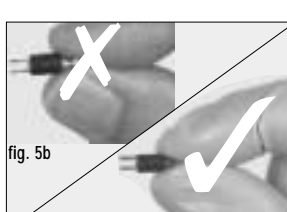


fig. 5b

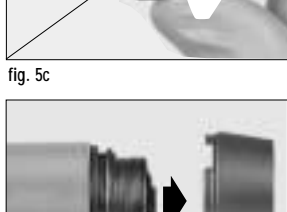


fig. 5c

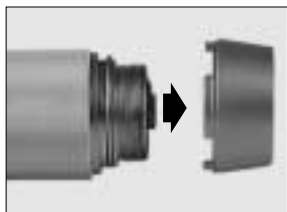


fig. 6a

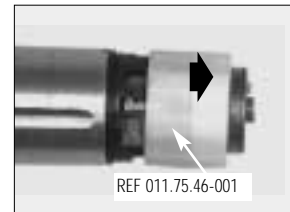


fig. 6b

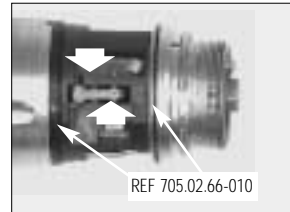


fig. 6c

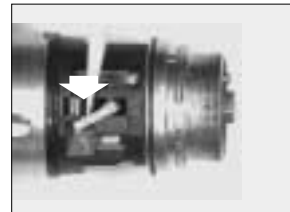


fig. 6d

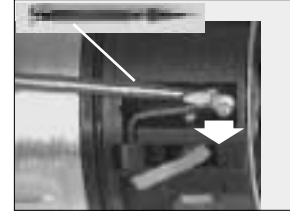


fig. 6e



fig. 7



fig. 8a



fig. 8b



fig. 6a

REF	Legend
1600077-001	MC3 LK micromotor, E INTRAmatic LUX
1600071-001	MC3 IR micromotor, E INTRAmatic
211.75.08-010	Carbon brushes
705.02.66-010	O-Ring
011.35.28-010	O-Ring
011.75.56-010	Flat seal
011.75.43-001	Sleeves MC3 LK, IR
011.75.46-001	Protective sleeve
1500007-005	Pack of 5 bulbs, for micromotors
1600307-001	Fow-meter for MC2 and MC3 micromotors
1600036-006	Spraynet, cleaning spray 500 ml, box of 6 cans





List of registered trade mark products ®:

Aquilon®	(Bien-Air)	Lubrifluid®	(Bien-Air)
Gyro Long-Life®	(Bien-Air)	Lubrimed®	(Bien-Air)
Isolite®	(Bien-Air)	Ondine®	(Bien-Air)
Isolux®	(Micro-Méga)		

In these instructions, "Device" corresponds to the product described in the heading "Type". For example, turbine, contra-angle, handpiece, motor, tube, electronics, connectors, station etc.

Symbols	
Movement in the direction indicated	Movement fully to the stop, in the direction indicated
   	   

Accessories in option










REF 011.35.28-010

REF 011.75.43-001

REF 011.75.46-001





REF 1600307-001

REF 011.75.43-001

REF 1500007-005

REF 211.75.08-010









REF 705.02.66-010

REF 011.75.56-010

REF 705.01.06-010

REF 1600036-006

Set supplied			
			
			
MC3 LK	1600077-001		X
			
MC3 IR	1600071-001		X

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